

SUP
PROJECT ID:
WITH: N/A

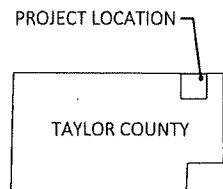
9545-00-71

JANUARY 2020

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 22



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T RIB LAKE, BERRY AVENUE

SPIRIT RIVER BRIDGE P600024

LOCAL STR

TAYLOR

STATE PROJECT NUMBER
9545-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9545-00-71		

37

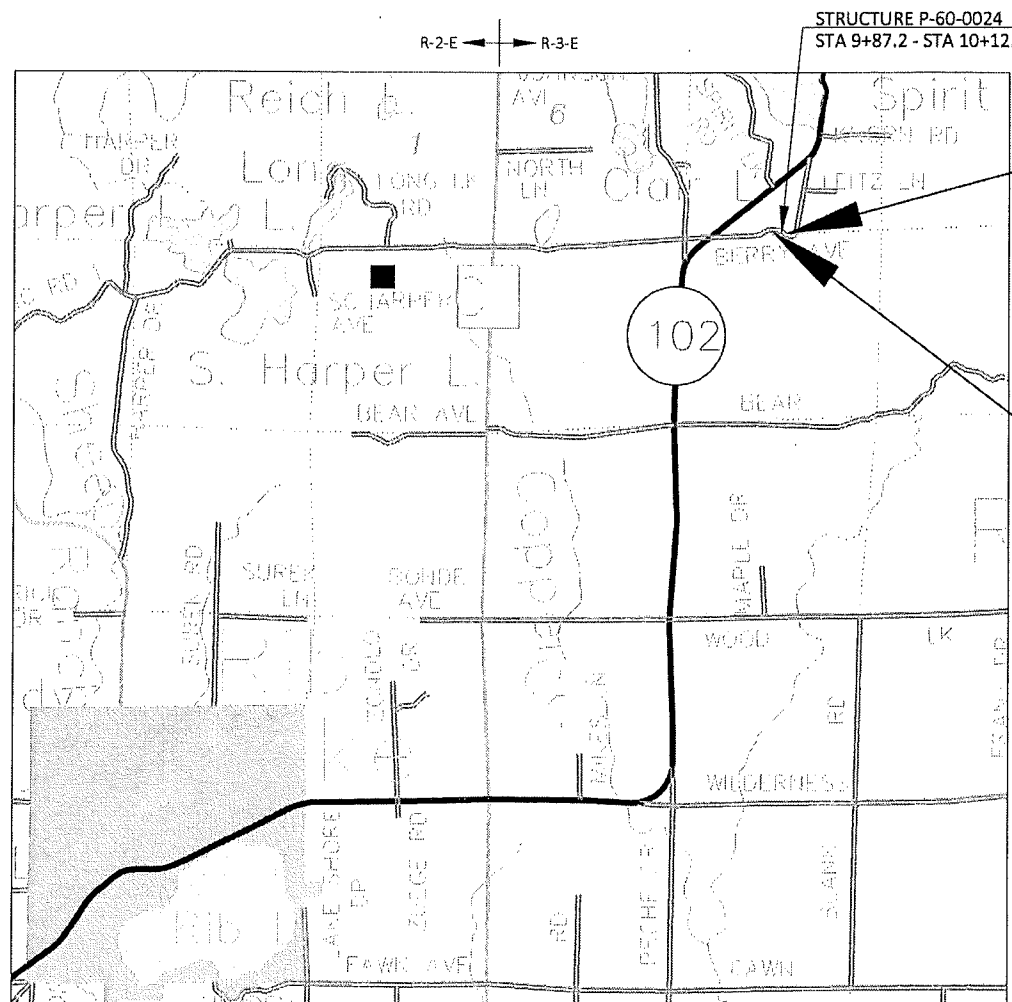
DESIGN DESIGNATION

A.A.D.T.	1983	=	30
A.A.D.T.	2023	=	<10
D.H.V.		=	N/A
D.D.		=	N/A
T.		=	N/A
DESIGN SPEED		=	N/A
ESALS		=	N/A

CONVENTIONAL SYMBOLS

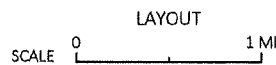
PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



END PROJECT
STA 10+16
Y=423,023.78
X=703,292.17

BEGIN PROJECT
STA 9+79
Y=423,034.41
X=703,256.73



TOTAL NET LENGTH OF CENTERLINE = 0.007 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), TAYLOR COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2011). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR
TOWN OF RIB LAKE
Date: 7/26/19
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

DATE: 7/24/19
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor: COOPER ENGINEERING
Designer: COOPER ENGINEERING
Project Manager: MATTHEW VAN NATTA
Regional Supervisor: ANDREW STENSLAND

APPROVED FOR THE DEPARTMENT
DATE: 7/29/19
(Signature)

E

LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LT.	LEFT
AC	ACRES	LS	LUMP SUM
AGG	AGGREGATE	MH	MANHOLE
AH	AHEAD	N	NORTH
ADT	AVERAGE DAILY TRAFFIC	NC	NORMAL CROWN
		PAVT	PAVEMENT
AVG.	AVERAGE	PC	POINT OF CURVATURE
ASPH	ASPHALTIC	PE	PRIVATE ENTRANCE
BK.	BACK	PI	POINT OF INTERSECTION
BM	BENCHMARK	PL	PROPERTY LINE
Δ	CENTRAL ANGLE OR DELTA	PP	POWER POLE
☉, C/L	CENTERLINE	PT	POINT OF TANGENCY
C & G	CURB AND GUTTER	R	RANGE, RADIUS
CABC	CRUSHED AGGREGATE BASE COURSE	RCCP	REINFORCED CONCRETE CULVERT PIPE
CONC.	CONCRETE	RD	ROAD
		REBAR	REINFORCEMENT BAR
COR	CORNER	REQD	REQUIRED
CORR	CORRUGATED	RDWY	ROADWAY
CSCP	CORRUGATED STEEL CULVERT PIPE	RHF	RIGHT HAND FORWARD
CSPA	CORRUGATED STEEL PIPE ARCH	RL, R/L	REFERENCE LINE
		RR	RAILROAD
CTH	COUNTY TRUNK HIGHWAY	RT.	RIGHT
CP.	CULVERT PIPE	R/W	RIGHT-OF-WAY
CY	CUBIC YARD	S	SOUTH
CWT.	HUNDREDWEIGHT	SAN S	SANITARY SEWER
DIA	DIAMETER	SDD	STANDARD DETAIL DRAWING
D	DEGREE OF CURVE	SE	SUPER ELEVATION
DHV	DESIGN HOURLY VOLUME	SF.	SQUARE FEET
DWY	DRIVEWAY	SHLDR	SHOULDER
EBS	EXC. BELOW SUB GRADE	SPECS	SPECIFICATIONS
ELEV., EL	ELEVATION	SQ.	SQUARE
ELEC.	ELECTRIC	SS.	STORM SEWER
EXC	EXCAVATION	SY.	SQUARE YARD
EXIST	EXISTING	STH	STATE TRUNK HIGHWAY
E	EAST	ST.	STREET
FE	FIELD ENTRANCE	STA.	STATION
FF.	FACE TO FACE	SW	SIDEWALK
FL, F/L	FLOW LINE	T	TANGENT
FS	FULL SUPERELEVATION	TC	TOP OF CURB
G	GARAGE	TL, T/L	TRANSIT LINE
GN	GRID NORTH	TEL	TELEPHONE
H	HOUSE	TEMP	TEMPORARY
		TLE	TEMPORARY LIMITED EASEMENT
		TYP	TYPICAL
HYD	HYDRANT	USH	UNITED STATES HIGHWAY
I	INTERSECTION ANGLE	UG	UNDERGROUND
INTERS	INTERSECTION	V	DESIGN SPEED
INV.	INVERT	VAR.	VARIABLE
IP	IRON PIN OR PIPE	VERT	VERTICAL
LC	LONG CHORD OF CURVE	YD	YARD
LF	LINEAR FOOT		
LHF	LEFT HAND FORWARD		
L	LENGTH OF CURVE		

UTILITY CONTACTS

ELECTRIC

PRICE ELECTRIC COOPERATIVE
 BEN ORYSEN
 W6803 SPRINGS DRIVE
 PHILLIPS, WI 54555
 PHONE: (715) 339-2155
 EMAIL: borysen@price-electric.com

ALL UTILITIES LISTED ARE MEMBERS OF DIGGERS HOTLINE



OTHER CONTACTS

DESIGN CONSULTANT

COOPER ENGINEERING
 JACOB FRIBERG
 2600 COLLEGE DRIVE
 RICE LAKE, WI 54868
 PHONE: (715) 234-7008
 EMAIL: jfriberg@cooperengineering.net

TOWN CHAIRMAN

TOWN OF RIB LAKE
 JOE KNORN
 W2382 STH 102
 RIB LAKE, WI 54470
 PHONE: (715) 427-3346
 EMAIL: townofriblake@yahoo.com

WDNR REGIONAL CONTACT

WDNR/WISDOT LIAISON
 WENDY HENNIGES
 107 SUTLIFF AVENUE
 RHINELANDER, WI 54501
 PHONE: (715) 365-8916
 EMAIL: Wendy.Henniges@wisconsin.gov

GENERAL NOTES:

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.

ACCESS TO ALL RESIDENCES & SIDE ROADS SHALL BE MAINTAINED DURING CONSTRUCTION.

THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOW SHOWN.

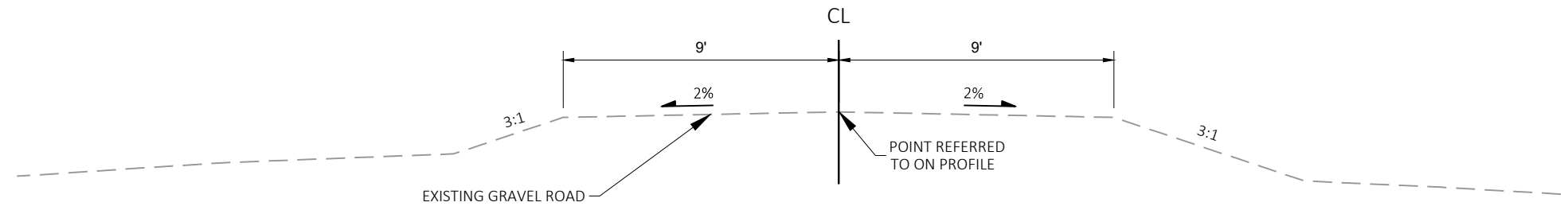
THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

BERRY AVENUE WILL BE CLOSED DURING CONSTRUCTION AND NO DETOUR ROUTE WILL BE MARKED.

RUNOFF COEFFICIENT TABLE

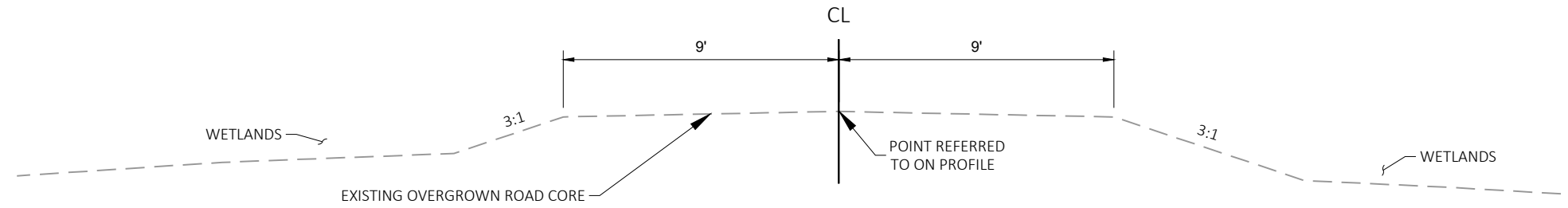
LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (%)			SLOPE RANGE (%)			SLOPE RANGE (%)			SLOPE RANGE (%)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 0.5 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.04 ACRES



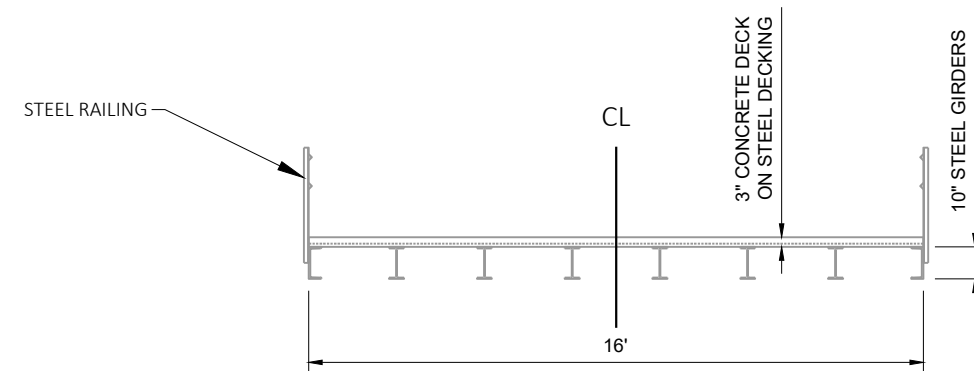
EXISTING TYPICAL SECTION

BERRY AVENUE
STA 6+67 - 8+65
STA 11+70 - 13+25



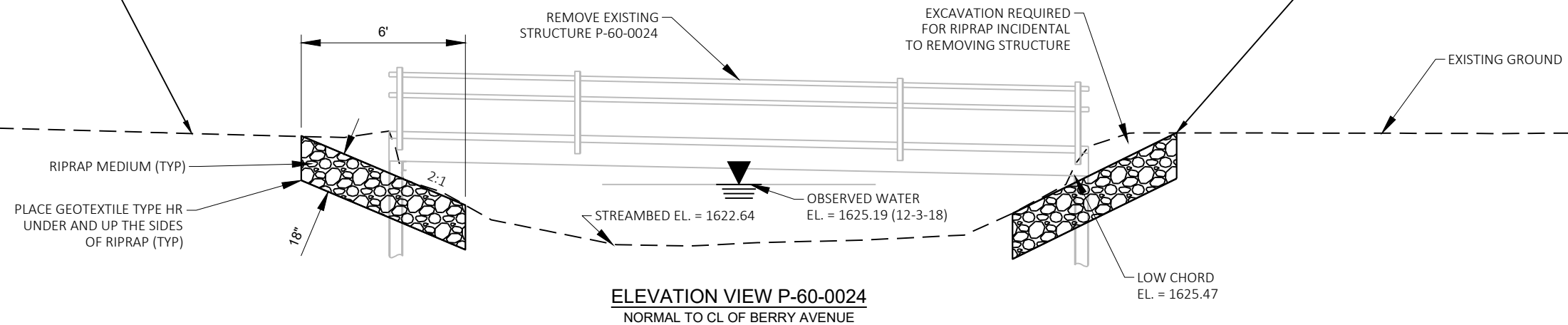
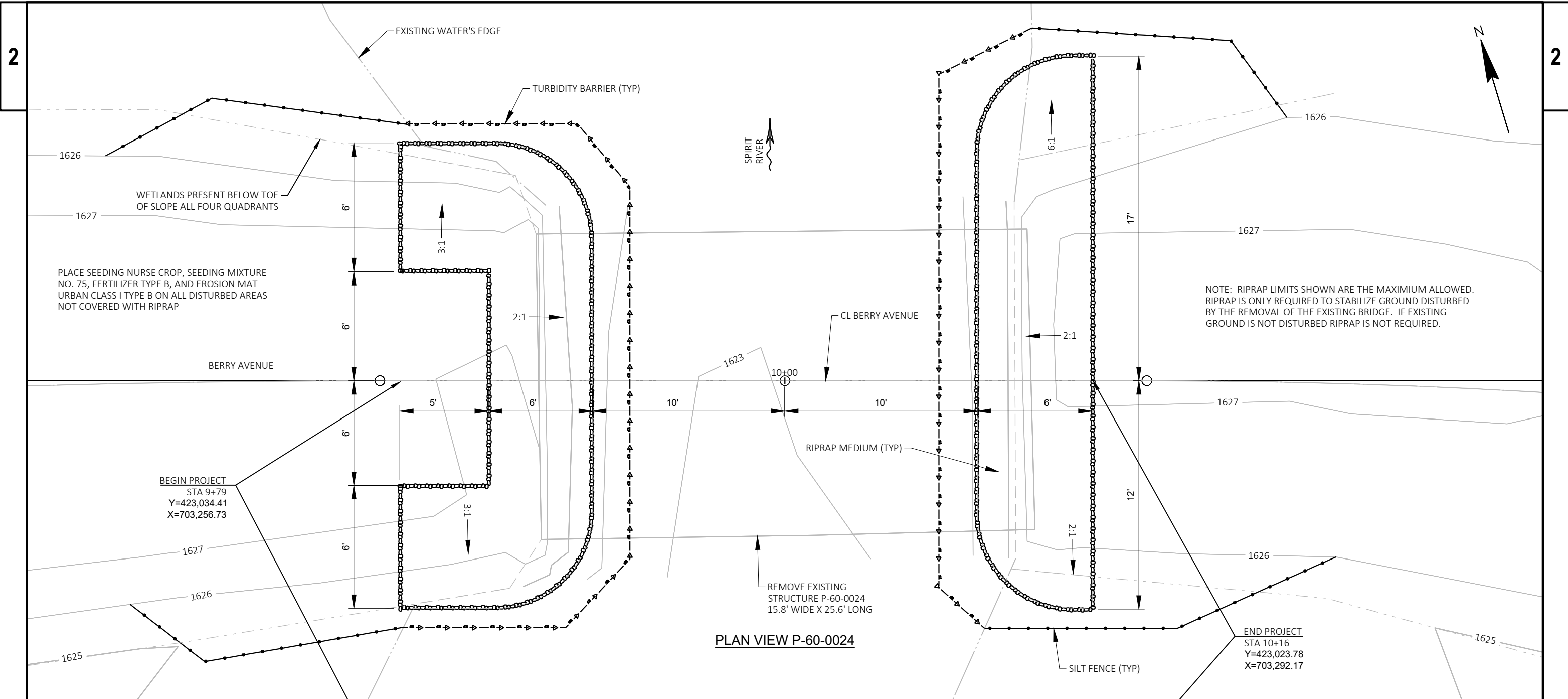
EXISTING TYPICAL SECTION

CLOSED BERRY AVENUE
STA 8+65 - 9+87
STA 10+13 - 11+70



EXISTING TYPICAL SECTION

P-60-0024
STA 9+87 - 10+13



PROJECT NO: 9545-00-71

HWY: BERRY AVENUE

COUNTY: TAYLOR

EROSION CONTROL DETAIL

SHEET

E

Estimate Of Quantities

9545-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0004	204.9060.S	Removing (item description) 01. Gate	EACH	2.000	2.000
0006	213.0100	Finishing Roadway (project) 01. 9545-00-71	EACH	1.000	1.000
0008	606.0200	Riprap Medium	CY	20.000	20.000
0010	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9545-00-71	EACH	1.000	1.000
0012	619.1000	Mobilization	EACH	1.000	1.000
0014	625.0500	Salvaged Topsoil	SY	15.000	15.000
0016	628.1504	Silt Fence	LF	65.000	65.000
0018	628.1520	Silt Fence Maintenance	LF	65.000	65.000
0020	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0022	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0024	628.2008	Erosion Mat Urban Class I Type B	SY	100.000	100.000
0026	628.6005	Turbidity Barriers	SY	50.000	50.000
0028	629.0210	Fertilizer Type B	CWT	0.100	0.100
0030	630.0175	Seeding Mixture No. 75	LB	10.000	10.000
0032	630.0400	Seeding Nurse Crop	LB	10.000	10.000
0034	630.0500	Seed Water	MGAL	5.000	5.000
0036	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	6.000	6.000
0038	637.2220	Signs Type II Reflective SH	SF	13.500	13.500
0040	638.2602	Removing Signs Type II	EACH	2.000	2.000
0042	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0044	643.0420	Traffic Control Barricades Type III	DAY	60.000	60.000
0046	643.0705	Traffic Control Warning Lights Type A	DAY	80.000	80.000
0048	643.0900	Traffic Control Signs	DAY	20.000	20.000
0050	643.5000	Traffic Control	EACH	1.000	1.000
0052	645.0120	Geotextile Type HR	SY	60.000	60.000

CATEGORY	STATION	SIDE	POSTS		SIGNS		REMARKS	
			REMOVING	WOOD	TYPE II	REMOVING		REMOVING
			GATE	4x6-INCH	REFLECTIVE	SIGNS		SMALL SIGN
			204.9060.S	x 12 FT	SH	TYPE II		SUPPORTS
			EA	EA	SF	EA	EA	
0010	8+56	RT	-	-	-	1	1	
0010	8+65	LT/RT	-	3	6.75	-	-	(3) W5-56
0010	9+20	LT/RT	1	-	-	-	-	
0010	10+45	LT	-	-	-	1	1	
0010	10+55	LT/RT	1	-	-	-	-	
0010	11+70	LT/RT	-	3	6.75	-	-	(3) W5-56
TOTAL 0010			2	6	13.5	2	2	

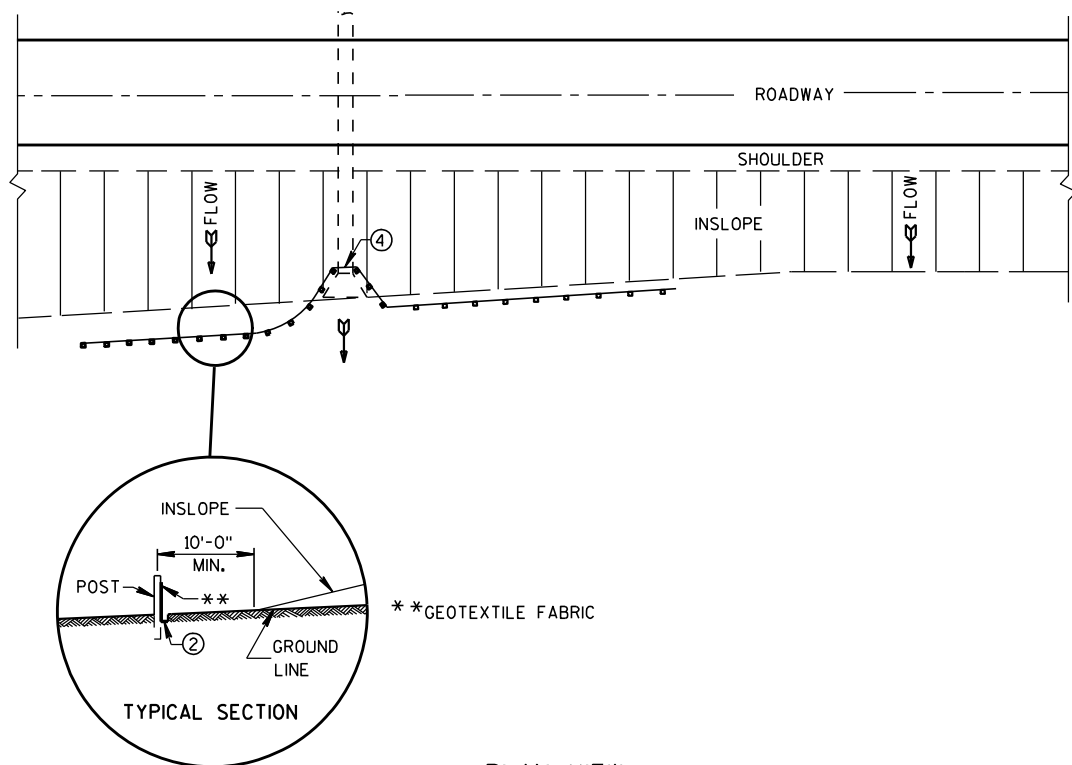
CATEGORY	LOCATION	RIPRAP	SILT	SILT FENCE	TURBIDITY	GEOTEXTILE	REMARKS
		MEDIUM	FENCE	MAINTENANCE	BARRIER	TYPE HR	
		606.0200	628.1504	628.1520	628.6005	645.0120	
		CY	LF	LF	SY	SY	
0010	P-60-0024 WEST	10	30	30	30	30	
0010	P-60-0024 EAST	10	35	35	20	30	
TOTAL 0010		20	65	65	50	60	

CATEGORY	LOCATION	EROSION					REMARKS
		MAT	SEEDING	SEEDING	SEED		
		URBAN	MIXTURE	NURSE	WATER		
		SALVAGED	NO. 75	CROP			
TOPSOIL	CLASS I	FERTILIZER					
	TYPE B	TYPE B	LB	LB	MGAL		
	625.0500	628.2008	629.0210	630.0175	630.0400	630.0500	
0010	UNDISTRIBUTED	15	100	0.1	10	10	5
TOTAL 0010		15	100	0.1	10	10	5

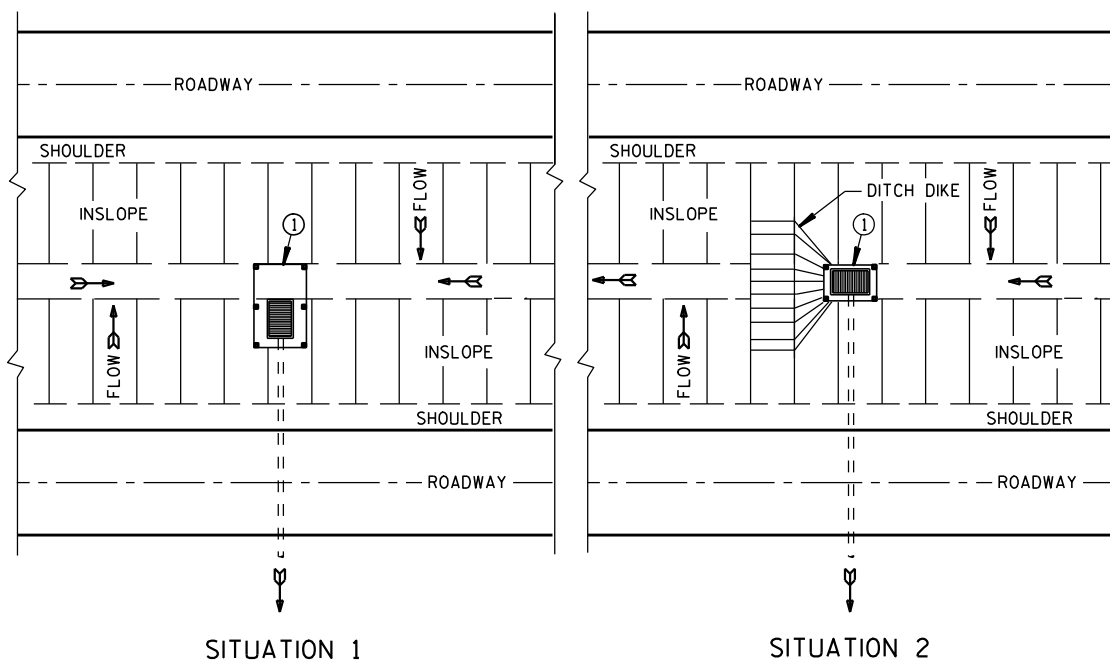
CATEGORY	DAYS	TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		REMARKS
		BARRICADES	WARNING LIGHTS	WARNING LIGHTS	CONTROL	CONTROL		
		TYPE III	TYPE A	TYPE A	SIGNS	SIGNS		
		643.0420	643.0705	643.0900				
		#	DAYS	#	DAYS	#	DAYS	
0010	10	3	30	4	40	1	10	BRIDGE OUT DETAIL D WEST SIDE
0010	10	3	30	4	40	1	10	BRIDGE OUT DETAIL D EAST SIDE
TOTAL 0010			60		80		20	

Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C26-04	END-OF-ROADWAY SIGNING
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

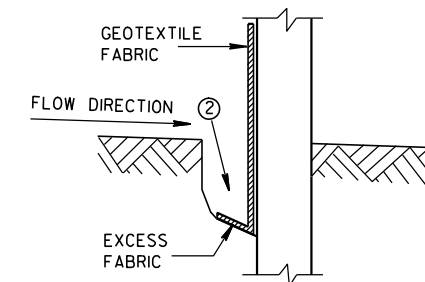


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

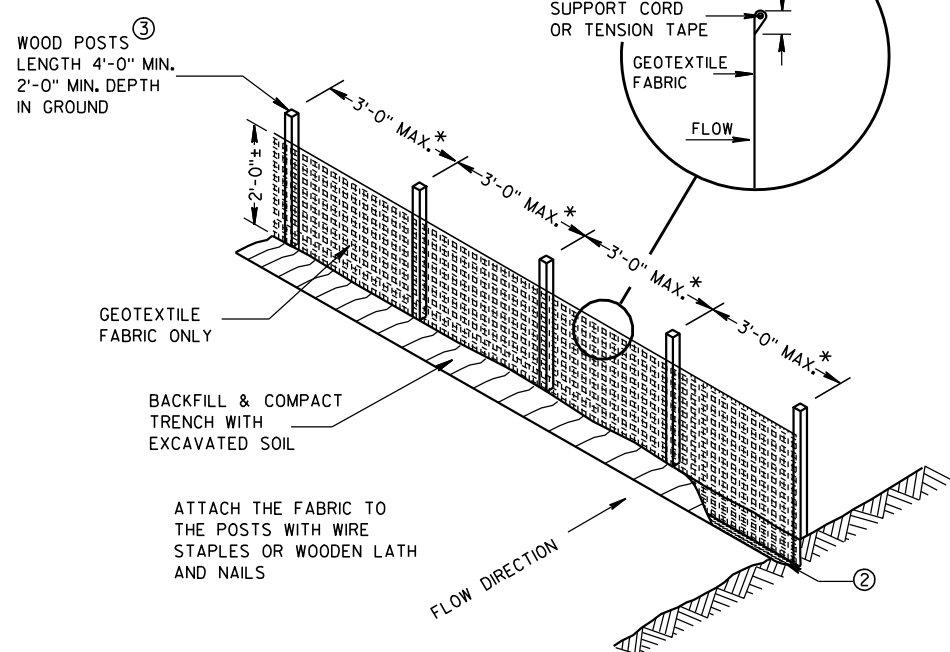
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



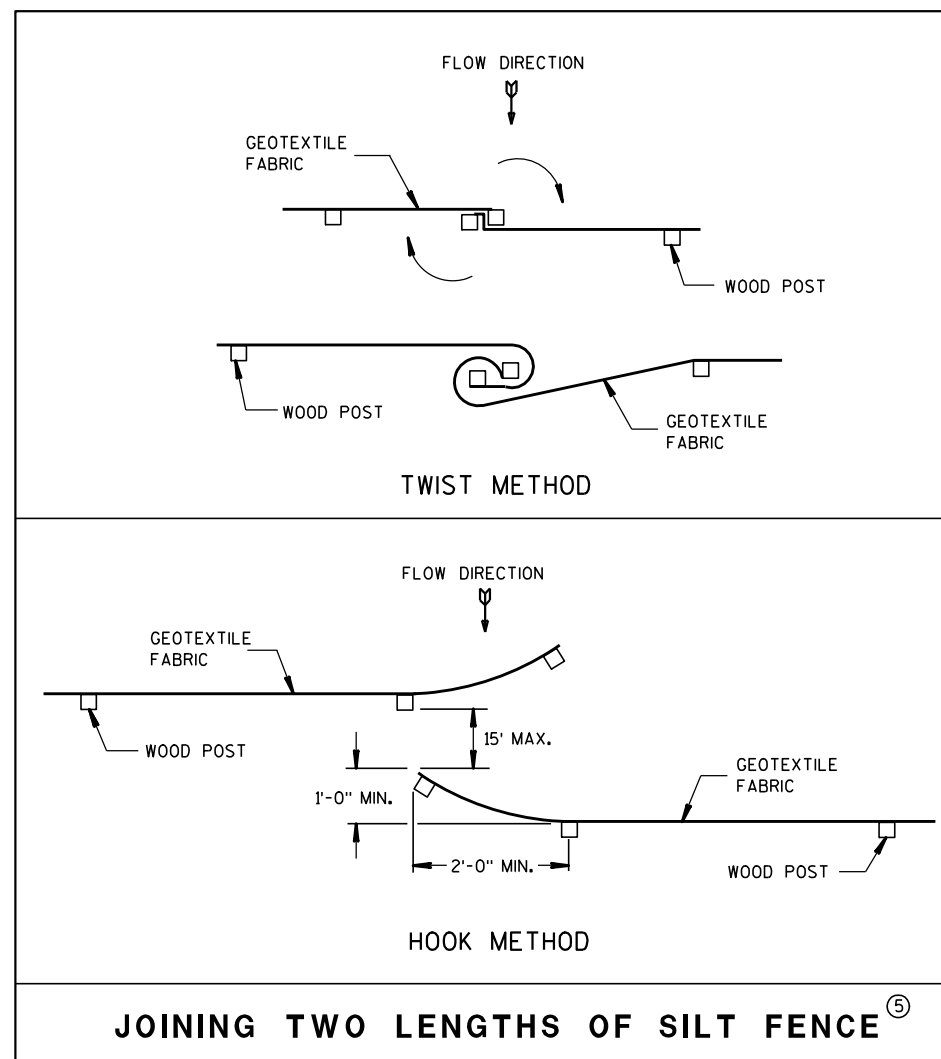
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

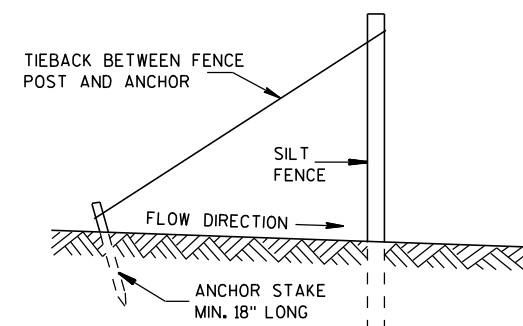


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

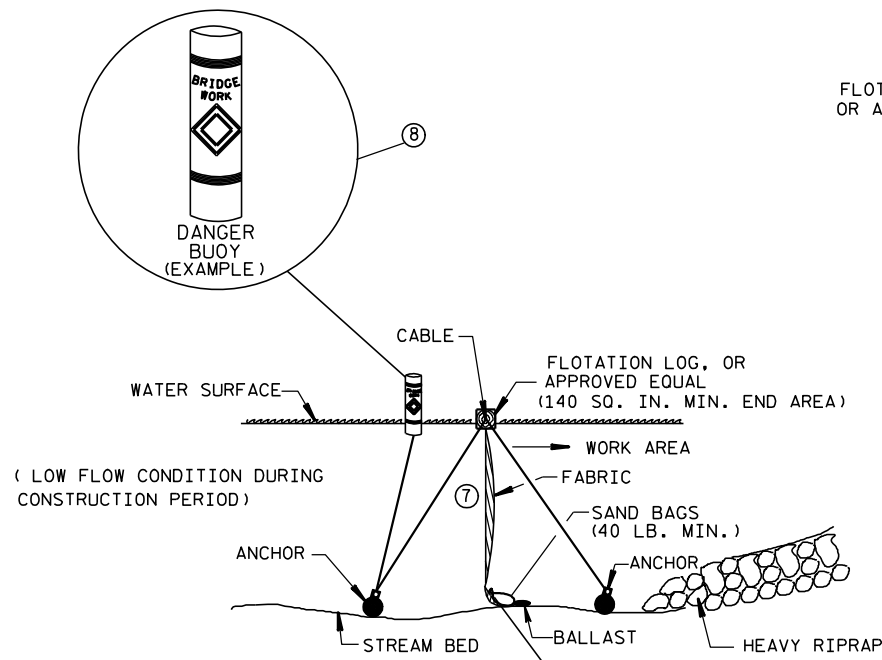
APPROVED

4-29-05

DATE

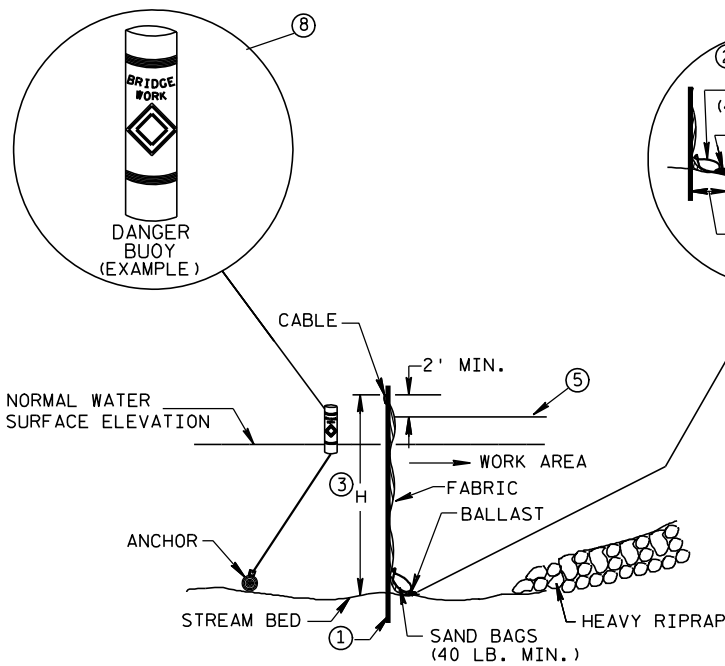
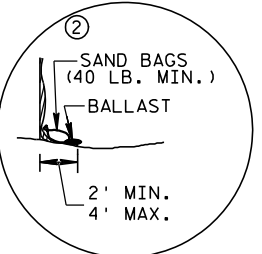
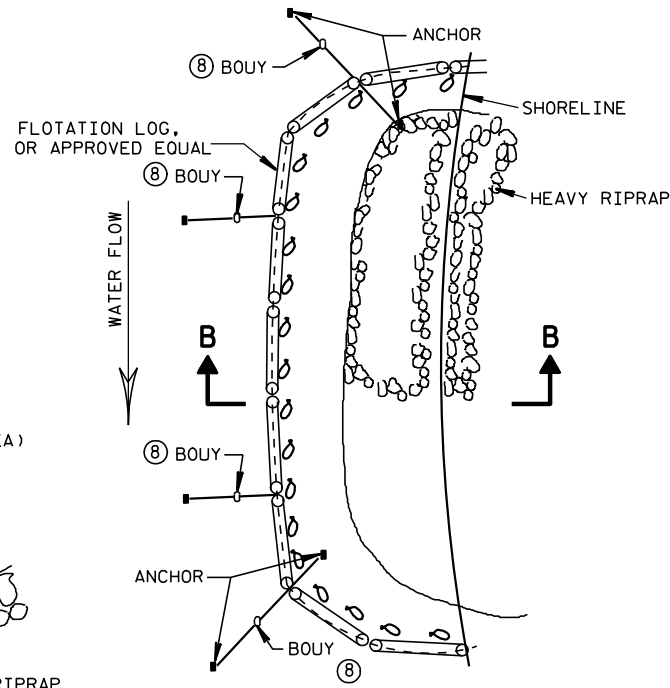
FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



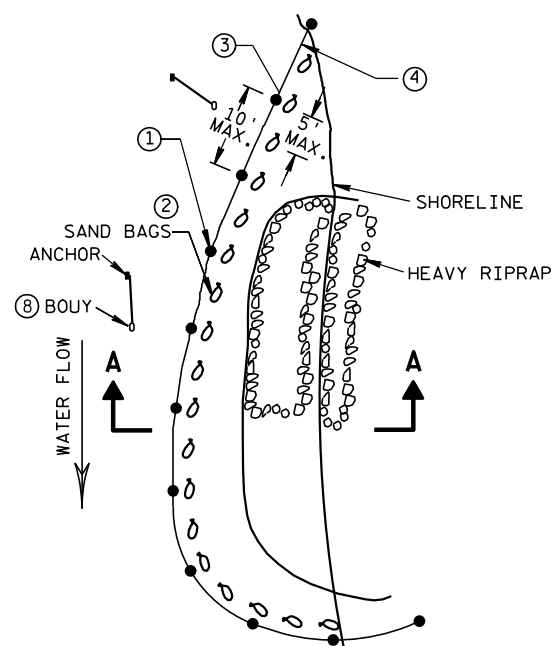
SECTION B-B

TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A

TURBIDITY BARRIER STANDARD POST INSTALLATION



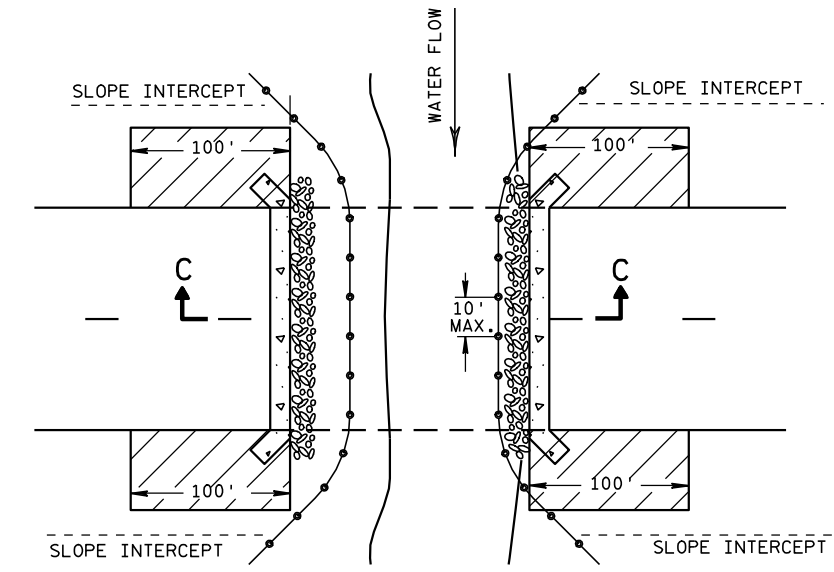
PLAN VIEW

GENERAL NOTES

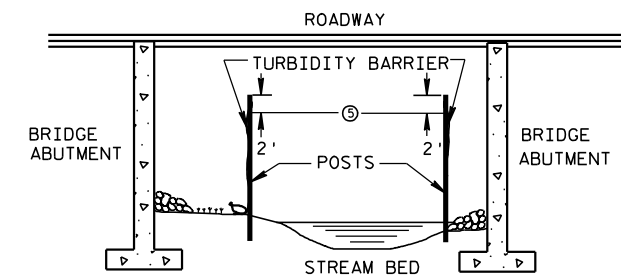
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



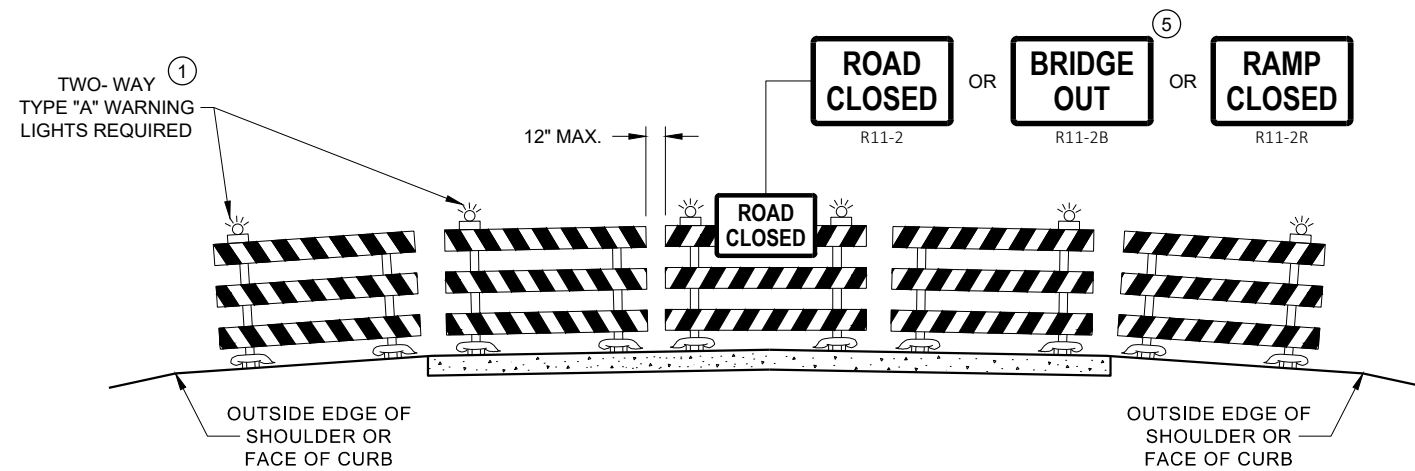
SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

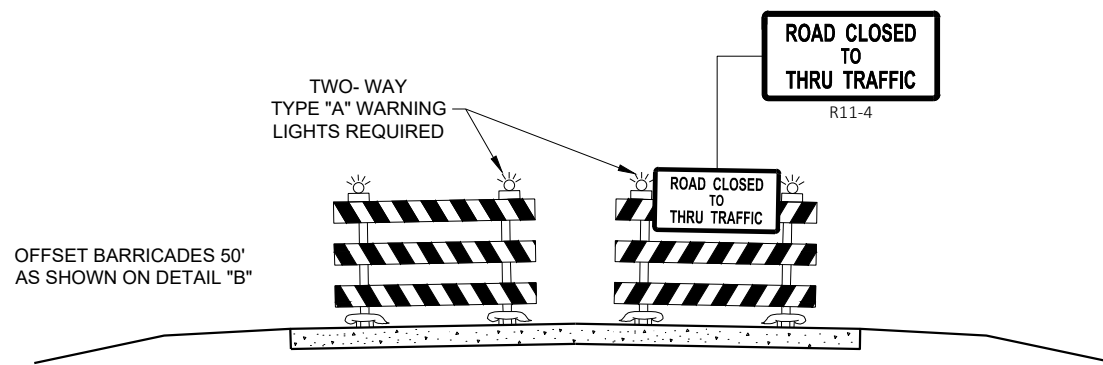
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 /S/ Beth Canestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

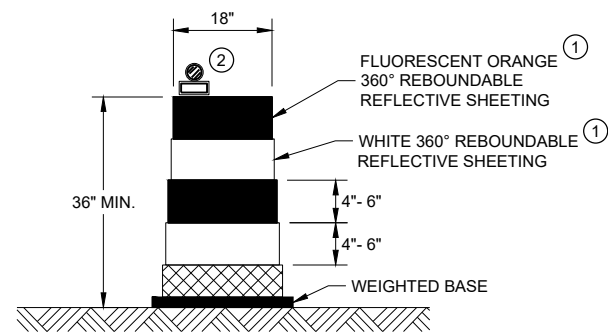
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

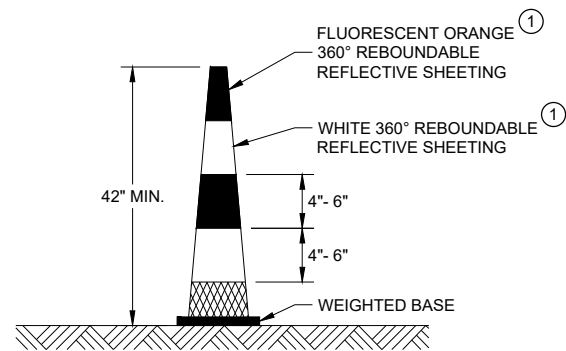
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

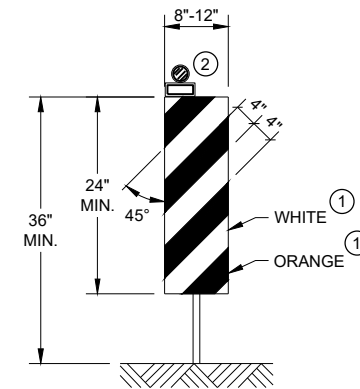


DRUM



42" CONE

DO NOT USE IN TAPERS
 1/2 SPACING OF DRUMS

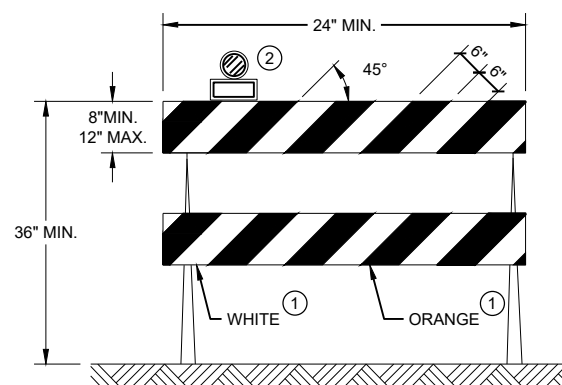


VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.

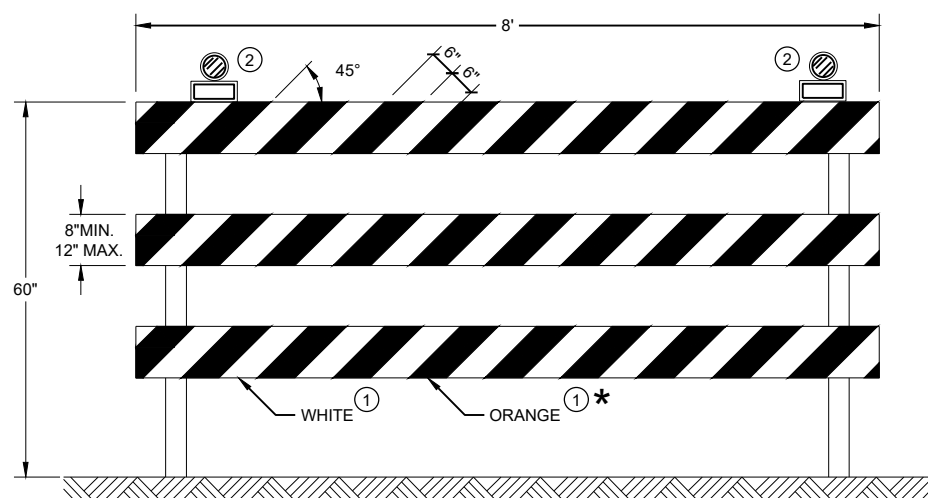
GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

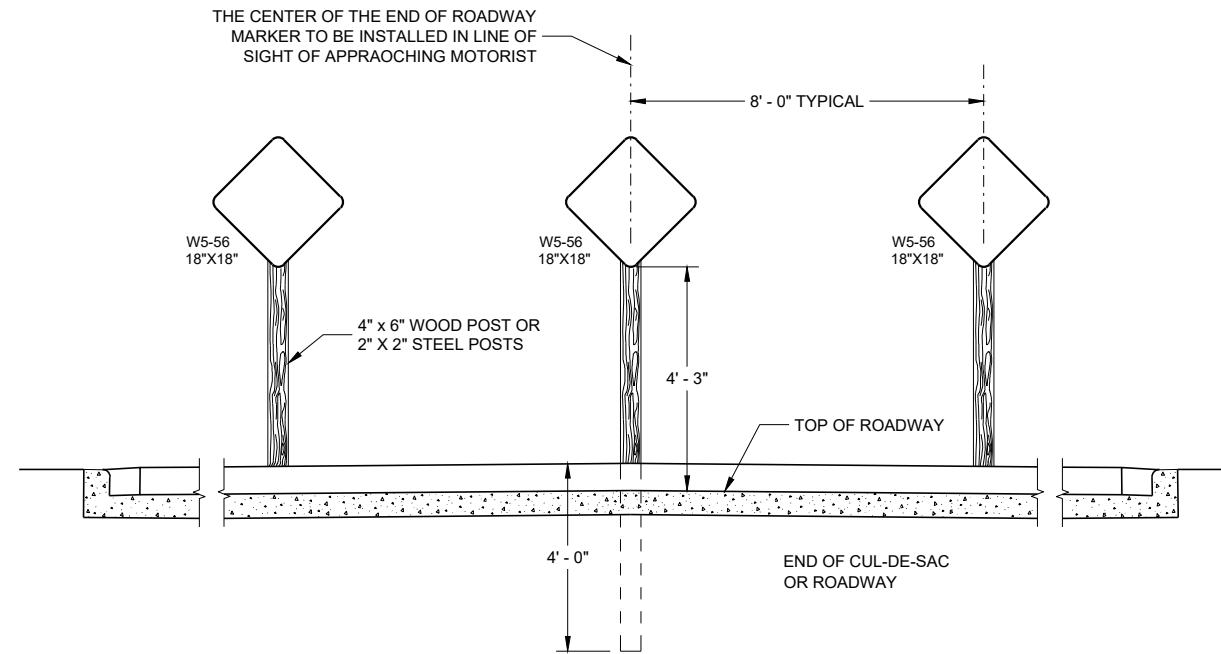
CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.

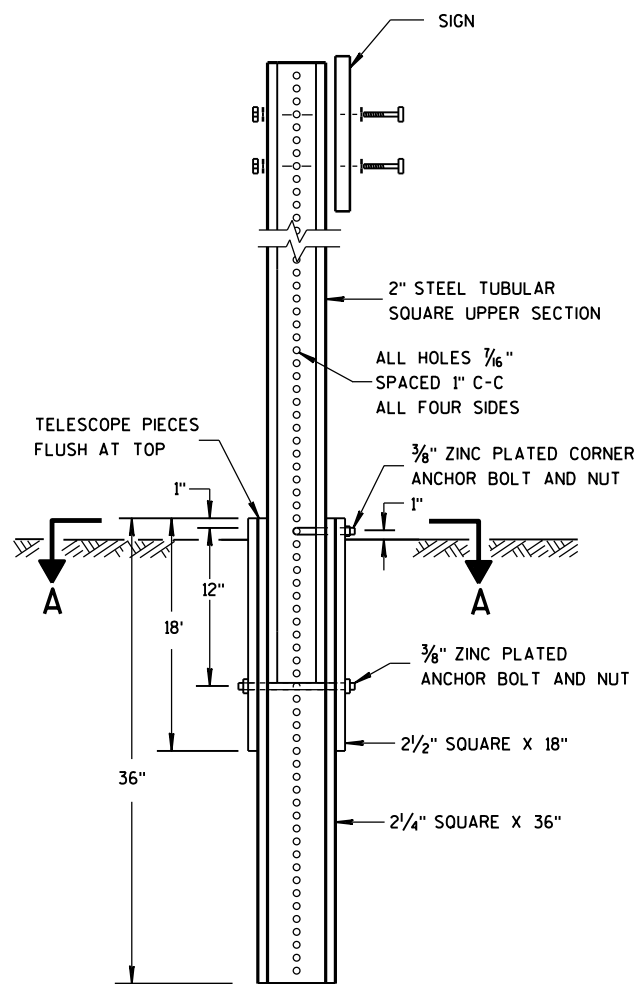


TYPICAL SIGN INSTALLATION

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER



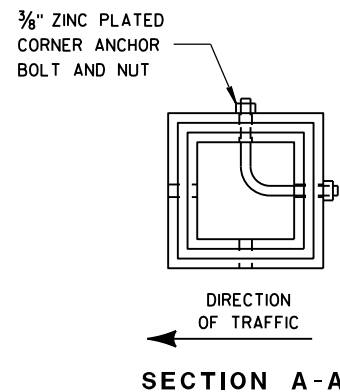
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

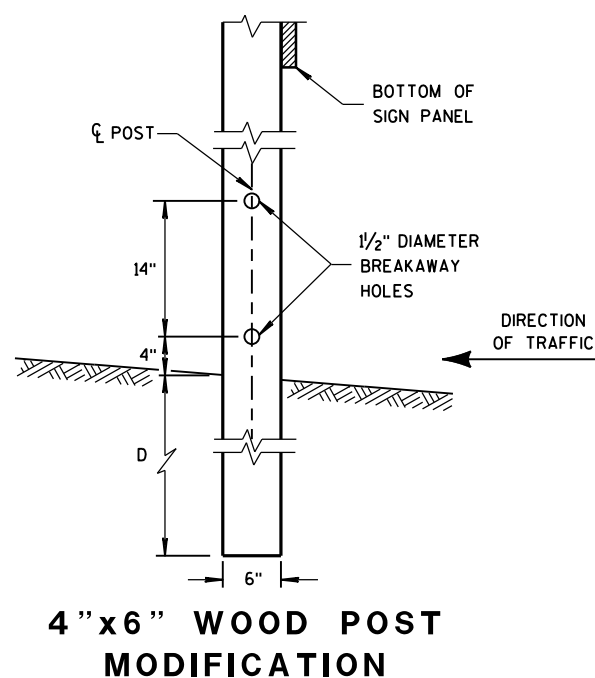
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

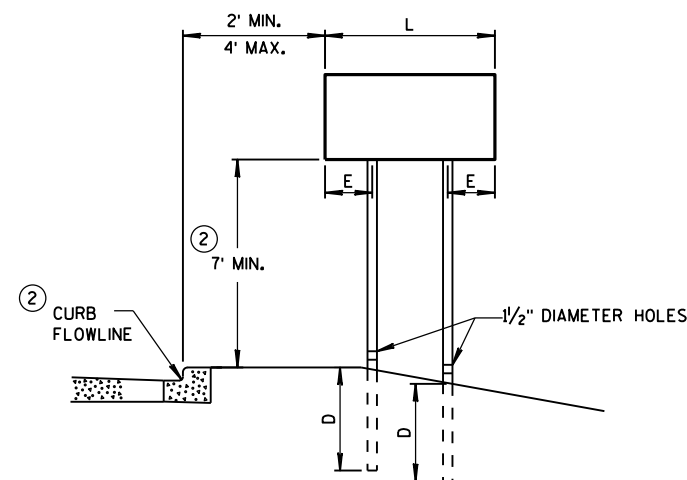
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.



SECTION A-A



4" X 6" WOOD POST MODIFICATION

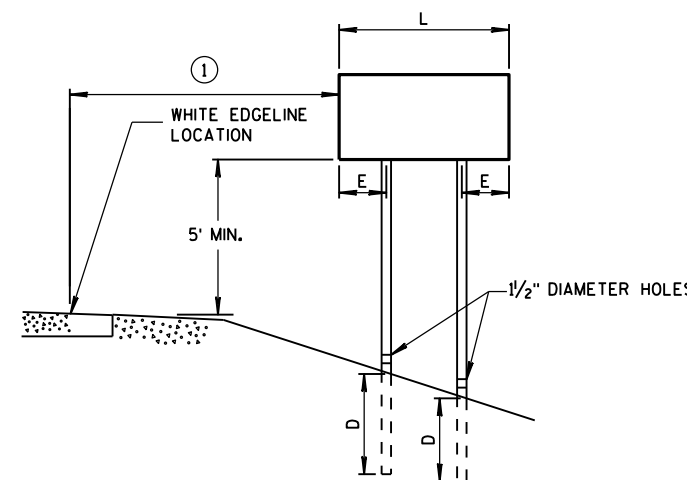


URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



RURAL AREA

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

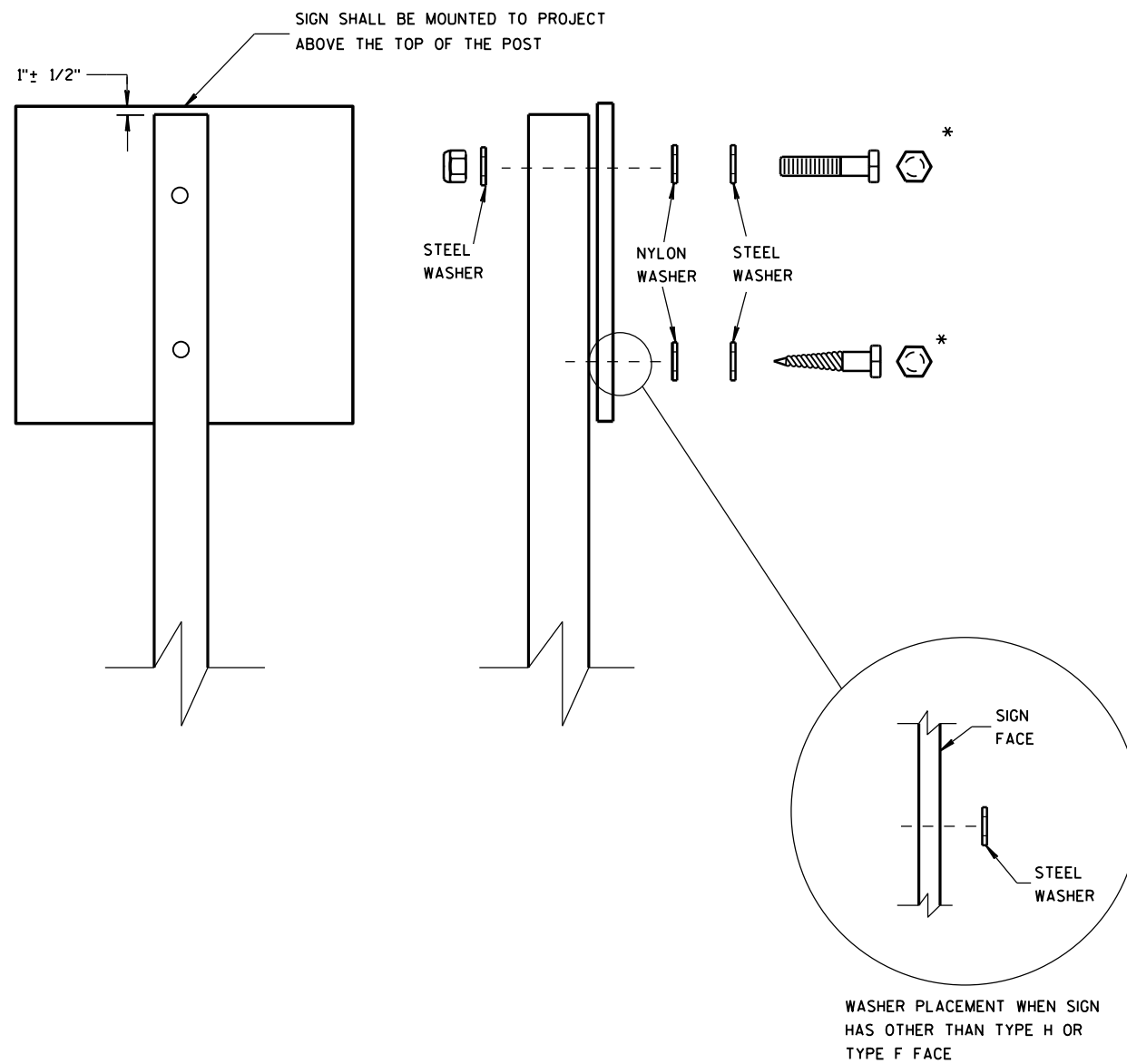
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 5/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

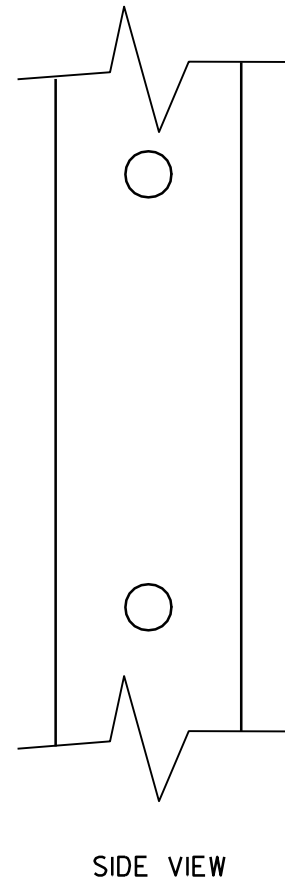
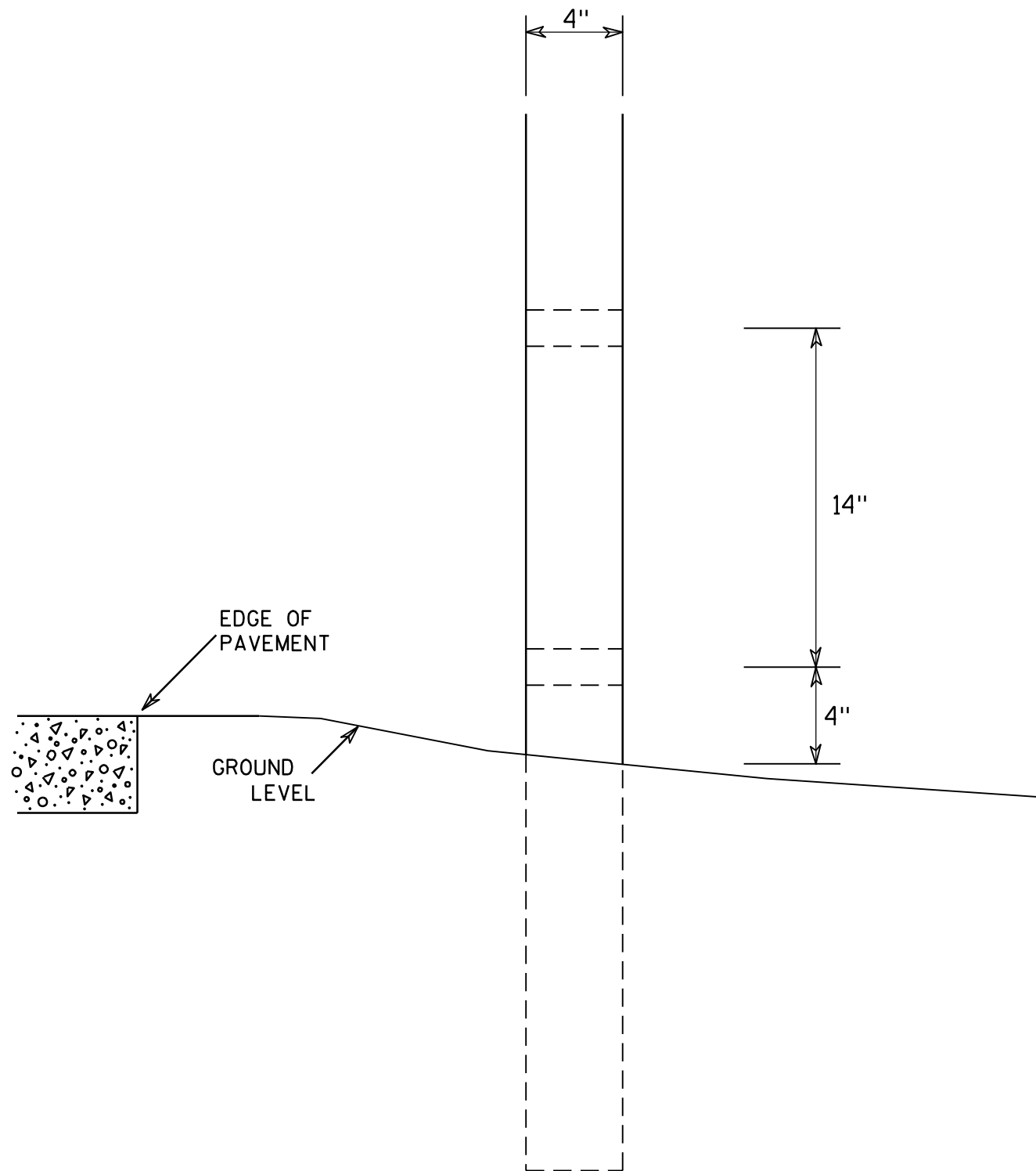
WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



GENERAL NOTES

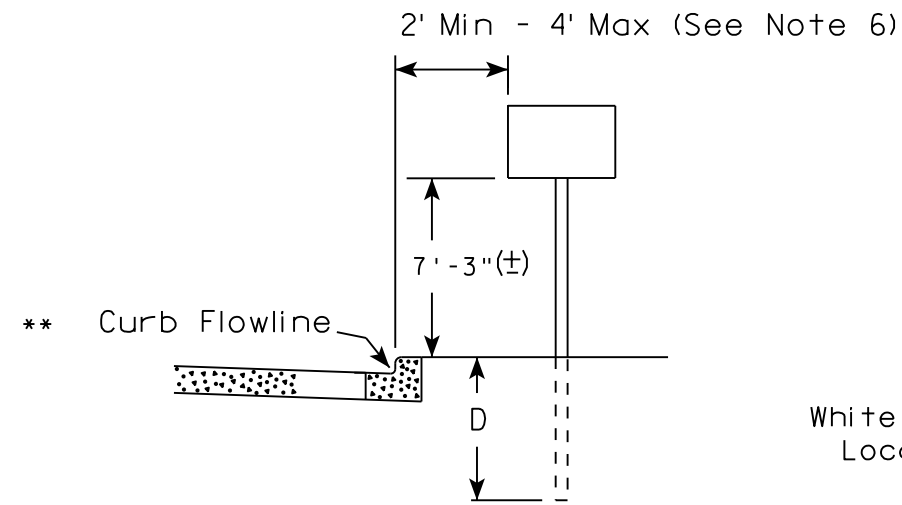
1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

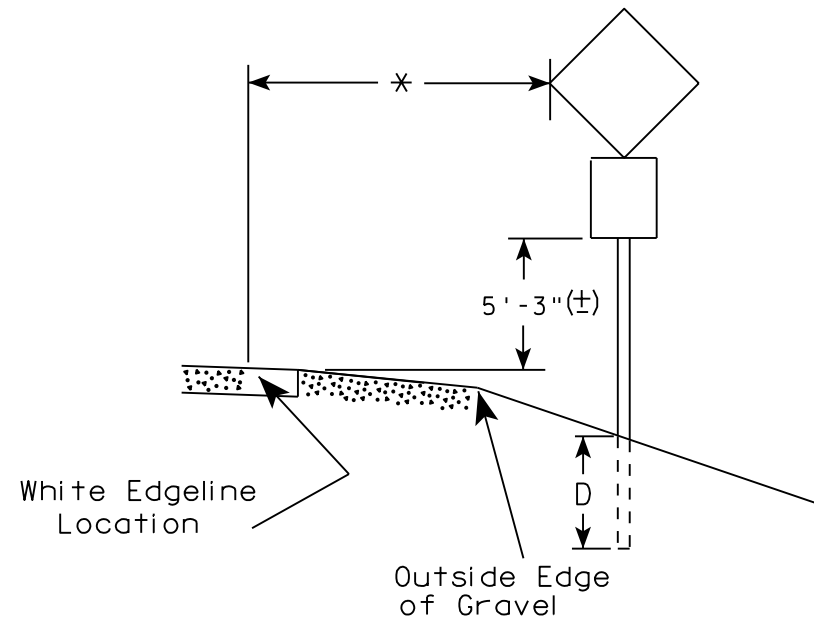
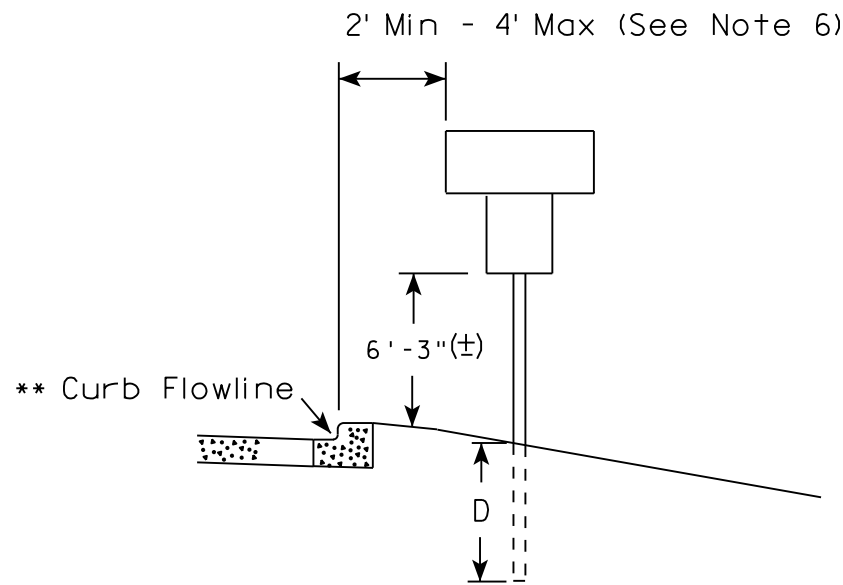
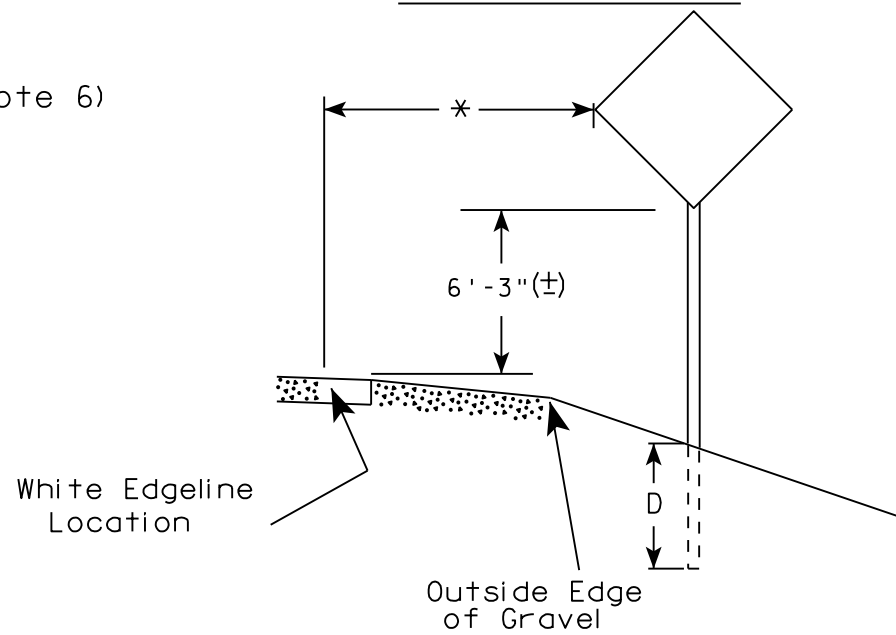
7

4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

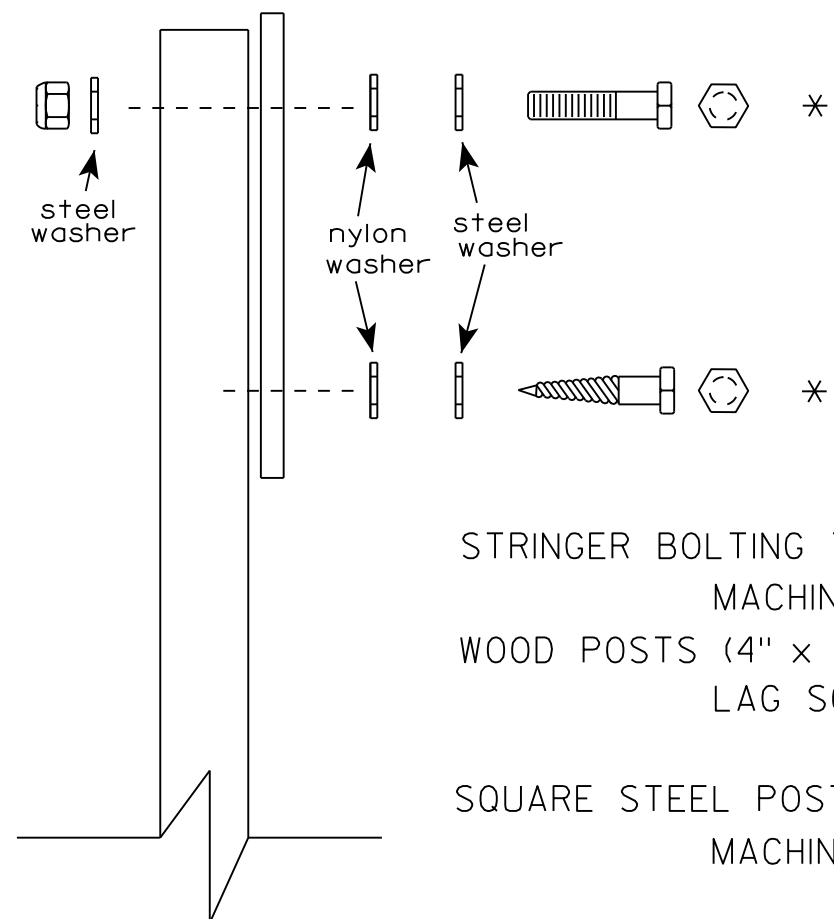
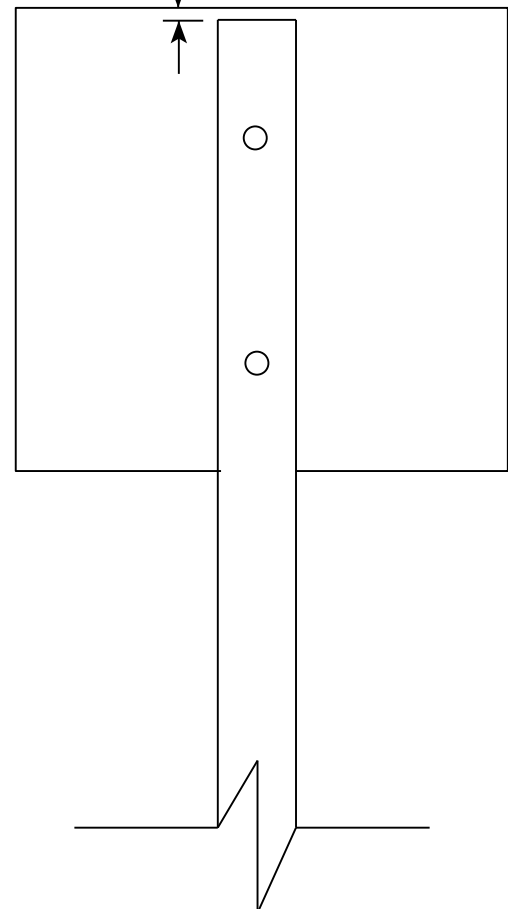
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

1"± 1/2"

SIGN SHALL BE MOUNTED TO PROJECT ABOVE THE TOP OF THE POST



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

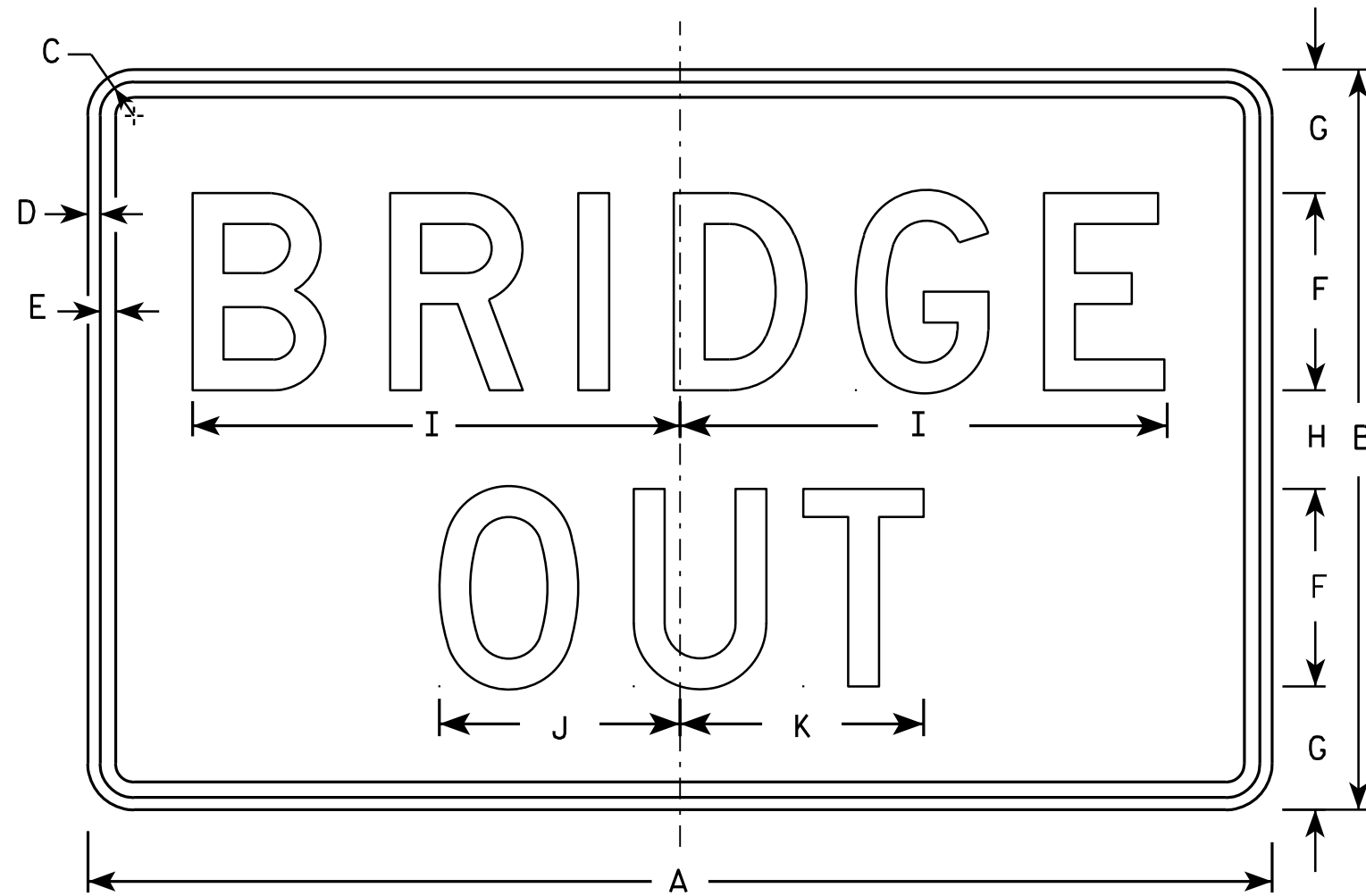
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

7

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 - Background - White
 - Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R11-2B

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

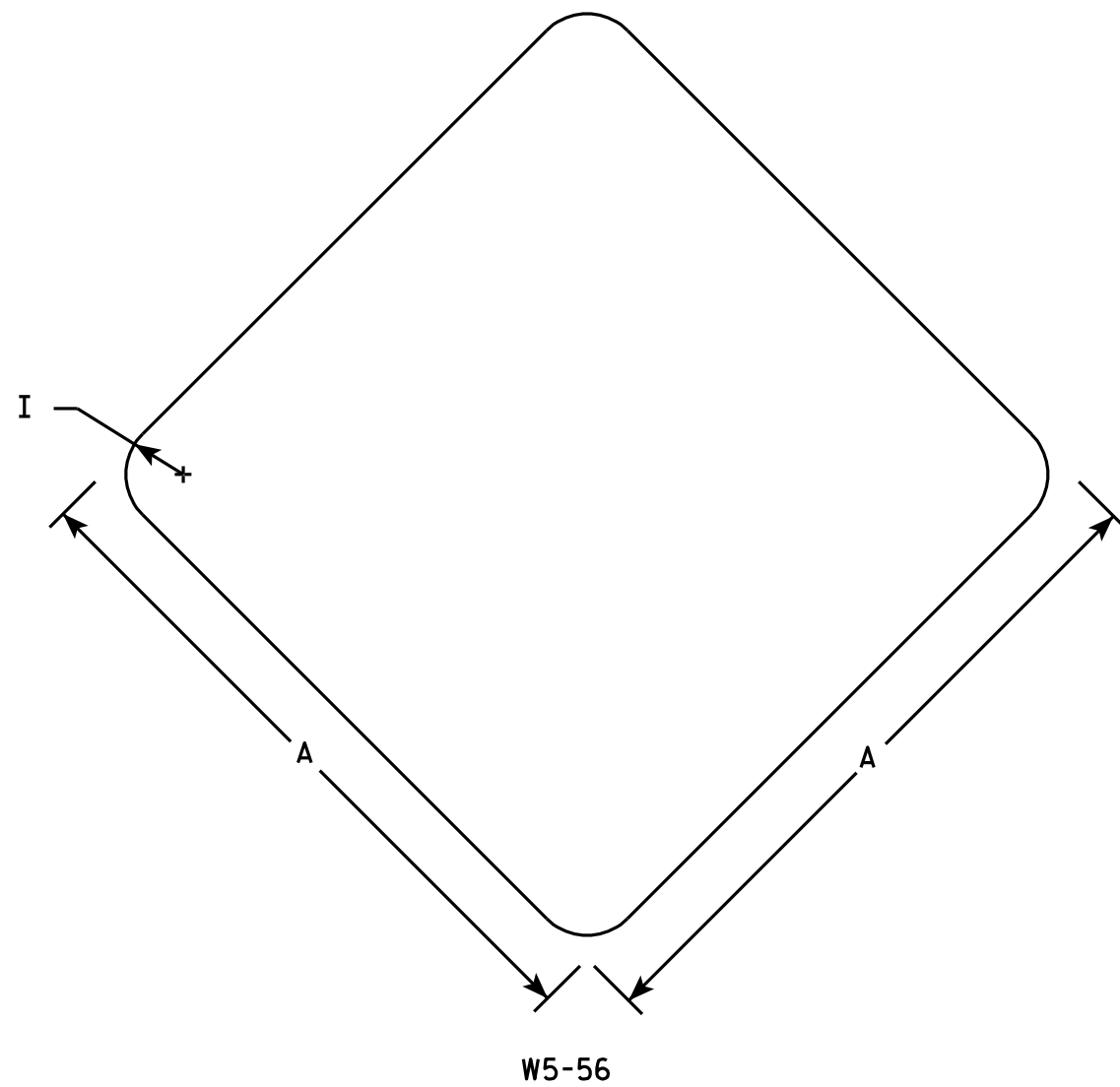
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

PROJECT NO: _____ SHEET NO: _____ E

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																											

STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

Notes



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